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08/385,073 02/07/95 STARK

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EXAMINER

ROSENBERGER, R

ART UNIT

PAPER NUMBER

25M1/0510  
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261 MADISON AVENUE  
NEW YORK NY 10016

2505

DATE MAILED:

05/10/95

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on \_\_\_\_\_ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892.        | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.             | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152.       |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1, 6, 7, 11-15, 17-19, 22-24, 33-53 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2. ☒ Claims 2-5, 8-10, 16, 20, 21, 27-32 have been cancelled.

3. ☒ Claims 11-15, 17-19, 22-24, 35, 53 are allowed.

4. ☒ Claims 1, 6, 7, 33, 34, 36-52 are rejected.

5. ☐ Claims \_\_\_\_\_ are objected to.

6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).

12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

EXAMINER'S ACTION

1. The amendment filed 19 December 1994 and entered as requested in the papers filed 7 February 1995 cancel, among others, claims 2, 8, 9 and 10 (see the top of page 2 of the amendment); these claims are also requested to be amended (see page 3 of the amendment for claim 2, page 5 for claim 8, and page 6 for claims 9 and 10. These claims have been cancelled and are no longer active in this application.

2. Claims 37, 38 and 44 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 36 has been amended to include that the extended surface areas are "substantially constant spacing" from the other surface area defining each path, that the "extended surface area" of one of the paths is "contained within" and "substantially surrounded by" the "extended surface area" of the other path, and that the extend of the "extended areas" are "substantially greater than the distance separating said corresponding and separated surface area" defining the other end of their path. This claimed structure, taken as a whole, appears to limit what is claimed in claim 36 to two concentric circles. Thus it appears that claim 37 cannot be properly dependent form claim 36, as the extended areas are concentric, not parallel, and claim 38 appears to be redundant.

The subject matter of claim 44 has been incorporated into claim 43; claim 44 is thus redundant.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

5. Claims 43, 44, 49 and 51 are rejected under 35 U.S.C.

§ 102(b) as being anticipated by the prior art discussed on pages 2-4 of the specification or Borsboom (US 4,884,891).

Both the prior art of the specification and Borsboom disclose apparatus comprising optical means which, at a first distance from the surface (substantially zero) define at least one illumination area and at least one detection area, the two areas being separated from each other and defining a path through an interior portion of the material. At least one of the two areas is extended in length at a substantially constant spacing from the other surface. In both if the arrangement were placed at a second distance from the surface, it would inherently define detection and illumination areas on the surface which at least partially overlap.

6. Claims 1, 6, 7, 33, 34, 36-52 are rejected under 35 U.S.C. § 103 as being unpatentable over the prior art discussed on pages 2-4 of the instant specification and Borsboom (US 4,884,891) in view of Howarth (US 3,994,602) and Hirao et al (US 5,057,695).

The specification, on page 3, states that "typically" in the prior art interactance measurements are made using a "central aperture surrounded a small distance away by a ring aperture" Borsboom shows an arrangement with this structure, with a central aperture and a ring around the central aperture some distance apart. The rings of the prior art and of Borsboom are "extended in length" with "the total length of said extended surface area being substantially greater than the mean distance separating" the two areas defining the light path through the material.

The arrangement of the prior art in the specification discloses only a single path through the sample. It is known in the art to measure light passing through a material at two different distances; Borsboom teaches a second path through the object (scattered directly back) and both Howarth (figures 6 and 7) and Hirao et al (figures 2 and 4) teach two different path lengths through the material, neither directly back. It thus would have been obvious to provide means, as in Howarth and Hirao et al, to measure to different distances through the material being tested, because the art recognizes that this is useful. It would have been a straight-forward and obvious manner to do this in an arrangement such as shown by Borsboom of adding a second ring at the desired second distance.

In figure 4, Howarth shows that placing the light detector or transmitter at an angle to direct the light toward, or detect the light from, the other end of the light path through the material.

Hirao et al shows, in figure 5, the known technique of placing the illumination and the receivers on opposite sides of the object being measured.

The use of other arrangements than concentric circles for the illumination and detection areas would be obvious because it is the transmission of light through the material, and not the particular geometry of the light source and detectors, that is of functional importance.

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Remarks

7. Claims 11-15, 17, 19, 22-26, 35 and 53 are allowable.

8. In claim 43 and the claims dependent therefrom, applicant appears to be trying to claim a new use for an old device, the new use being patentable (see the allowance of claim 22). An allowable new use for an old device does not, however, allow the claiming and protection of the old device per se. At least as claimed in these claims, the device appears to be no more than the type of device known and used in the prior art; such a device cannot be patented (or re-patented) even if a new, useful and unobvious method of using it is invented.

9. The arguments filed with the amendment filed 19 December 1994 have been considered, but are considered moot due to the new grounds of rejection above.

10. Papers related to this application may be submitted to Group 2500 by facsimile transmission. Papers should be faxed to the Group 2500 PTO Fax Center. The faxing of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (15 November 1989). The Group 2500 Fax Center numbers are (703) 305-3594 and (703) 308-1753.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. A. Rosenberg whose telephone number is (703) 308-4804.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

R. A. Rosenberger  
9 May 1995



RICHARD A. ROSENBERGER  
EXAMINER  
ART UNIT 255